Appendix E

EARTHWORKS™

November 29, 2016

This is to confirm that on **July 14, 2015**, on behalf of Earthworks, I filmed the MarkWest Energy Partner's Humphreys Compressor Station in Warren Township, Belmont County, Ohio, using a Forward Looking InfraRed (FLIR) camera with a telephoto lens.

The GF320 FLIR camera used to film the Humphreys Compressor Station is calibrated to show gasses in the 3.3 to 3.4 micrometer range. In the July 14, 2015 FLIR video of the Humphreys station, using auto mode, the gases clearly appear as grey plumes above the stacks from which they are being emitted and are distinguishable from the heat associated with the stacks. In high sensitivity mode, the plume can be seen moving across the fenceline of the facility. The video also shows venting from the storage tanks.

While at the facility, my coworker and I experienced dizziness and headaches from very strong hydrocarbon odors. A mass spectrometer evaluation could confirm the presence of hydrocarbons emitting from this facility.

We left the facility before my video investigation was complete because we were promised access the next day. Unfortunately, this access was not granted. As a result, since July 14, 2015, our only access has been from the public road, which is far from the facility. If provided access, a more complete infrared video investigation could be conducted.

I am trained and certified in Level 1 Thermography by the Infrared Training Center (ITC), the same qualification as required by many oil and gas industry operators and regulators.

Sharon Wilson

Sharon Wilson
Gulf Regional Organizer, Earthworks' Oil & Gas Accountability Project
1612 K St., NW, Washington DC 20006
swilson@earthworksaction.org

EARTHWORKS™

November 29, 2016

This is to confirm that on **November 6, 2015**, on behalf of Earthworks, I filmed the MarkWest Energy Partner's Humphreys Compressor Station in Warren Township, Belmont County, Ohio, using a Forward Looking InfraRed (FLIR) camera with a telephoto lens.

The GF320 FLIR camera used to film the Humphreys Compressor Station is calibrated to show gasses in the 3.3 to 3.4 micrometer range. I filmed the November 6, 2015 FLIR video of the Humphreys station in high sensitivity mode due to the distance to the facility from the public road, as I did not have closer access. The gases clearly appear as grey plumes above the stacks from which they are being emitted and can be seen traveling beyond the facility.

I am trained and certified in Level 1 Thermography by the Infrared Training Center (ITC), the same qualification as required by many oil and gas industry operators and regulators.

Pete Dronkers
Southwest Circuit Rider, Earthworks' Oil & Gas Accountability Project
1612 K St., NW, Washington DC 20006
pdronkers@earthworksaction.org